

REMARKS

1. In response to the Office Action mailed April 23, 2009, Applicants respectfully request reconsideration. Claims 1, 2, 5, 7, 9-11 and 13-29 were last presented for examination. In the outstanding Office Action, claims 1, 2, 5, 7, 9-11 and 13-29 were rejected. By the foregoing Amendments, claims 1, 2, 5, 7, 9-11, 13 and 14-29 have been cancelled and claims 30-55 have been added. Thus, upon entry of this paper, claims 30-55 will be pending in this application. Of these twenty-six (26) claims, two (2) claims (claims 30 and 50) are independent.

2. Based upon the above Amendment and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Claim Rejections Under 35 USC § 103– Hayhurst in view of Crosby

3. Claims 1, 5, 7, 9-11, 13-14, 21-24 and 26 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,477,152 to Hayhurst (hereinafter, “Hayhurst”) in view of U.S. Patent No. 4,532,930 to Crosby et al., (hereinafter, “Crosby”). Applicants note that the Examiner cited 5,477,152 as Crosby’s patent number, rather than Crosby’s actual patent number, which is 4,532,930. (*See*, Office Action, page 2.) Applicants have taken this to be a typographical error in the listing of Crosby’s patent number.

4. By the foregoing amendments, Applicants have cancelled claims 1, 5, 7, 9-11, 13-14, 21-24 and 26, thereby rendering the rejections of these claims moot. However, for the Examiner’s edification Applicants will briefly explain why new claims 30-50 are patentable over the combination Hayhurst and Crosby. Specifically, Applicants assert that the modification of Hayhurst in view of Crosby is improper, and that the cited references fail to expressly or inherently disclose all the elements of Applicants’ new claims.

The Proposed Modification of Hayhurst in view of Crosby is Improper

5. Applicants submit that the proposed modification of Hayhurst in view of Crosby is improper because the Examiner has failed to provide an appropriate basis for making the proposed modification. As stated by the Supreme Court in *KSR International Co. v. Teleflex*

Inc., “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” (127 S.Ct. 1727, 1741 (2007).) The Supreme Court recognized that “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some **articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.**” (See *KSR*, 127 S.Ct. at 1741 (citing *In re Kahn*, 441 F.3d 977, 988 (C.A.Fed. 2006); emphasis added.) Applicants submit that the Examiner has failed to provide adequate reasoning for making the proposed modification.

6. Hayhurst is directed to a cable tester 50 having multiple pairs of different types of connectors. (See, Hayhurst, col. 2, lns. 58-67.) Tester 50 may be used to test different types of cables, and particularly a including a center conductor and a shield. (See, Hayhurst, col. 3, lns. 43-52 and 26-29.) Specifically, Hayhurst discloses that “the continuity of the center conductor and of the shield, and the presence of short circuits there between are simultaneously detected and indicated by tester 50.” (See, Hayhurst, col. 3, lns. 26-29.) To make those detections, “[t]he conductors within tester 50 establish current paths with the center conductor and shield of cable 34.” (See, Hayhurst, col. 3, lns. 43-52.) To test the center conductor and shield of cable 34, Hayhurst connects each of the center conductor and the shield in series with various combinations of conductors, resistors, batteries and light-emitting diodes (LEDs), and uses the LEDs to indicate whether there is continuity in the center conductor and shield and whether there is a short circuit. (See, Hayhurst, col. 3, ln. 54 – col. 4, ln. 3; and FIG. 2.)

7. In the Office Action, the Examiner admits that Hayhurst “failed to disclose a cochlear implant system with a first and second component comprises a transmitter coil and coil testing station.” (See, Office Action, page 3.) The Examiner relies upon Crosby to teach “a cochlear implant system for an auditory prosthesis [see title] comprising a cable 26 (the first component) and a transmitter coil 24 (the second component).” (See, Office Action, page 3.) The Examiner asserts that “it would have been obvious to one of ordinary skills in the art by the time the invention was made to modify Hayhurst to be use to test cochlear implant system cable and transmitter coil since both Crosby and Hayhurst teaches about the use of coaxial cable.” (See, Office Action, page 3.)

8. Applicants submit that the mere fact that a cable may be connected to a coil is not an adequate reason why it would have been obvious to modify Hayhurst's cable tester to test an inductive transmitter coil. As such, Applicants submit that the Examiner has only provided a conclusory and unsupported statement to explain why one of ordinary skill would seek to modify Hayhurst in view of Crosby.

9. Furthermore, Applicants submit that there is no adequate reason to combine the cited references because modifying Hayhurst to include an inductive connection would render Hayhurst unusable for its intended purpose. As noted, Hayhurst is configured to provide numerous types of information regarding the cable being tested, including "the continuity of the center conductor and of the shield, and the presence of short circuits there between are simultaneously detected and indicated by tester 50." (*See*, Hayhurst, col. 3, lns. 26-29.) In order to perform these tests, a direct electrical connection through the conductors is required. However, testing an inductive transmitter coil requires an inductive connection, rather than a direct electrical connection as shown by Hayhurst. Applicants submit that, by replacing the direct electrical connection with an inductive connection, the above specific functionality of Hayhurst may be lost, and/or result in process which may consume more time or power than a direct electrical connection, or result a process which is more susceptible to errors or malfunctions. Accordingly, Applicants submit that there is no adequate reason to modify the cable tester of Hayhurst as proposed by the Examiner. Thus, Applicants respectfully submit that the proposed modification of Hayhurst is improper.

***The Proposed Modification of Hayhurst Does not Contain
All Elements of Applicants' New Claims***

Claim 30

10. Applicants' claim 30 recites, in part, a "testing comprising: . . . a plurality of cable testing stations each configured to electrically connect to an end of the cable; a coil testing station configured to inductively connect to the transmitter coil; and a testing circuit configured to drive the transmitter coil via a first cable testing station to concurrently test the cable and the transmitter coil when the cable is connected to the first cable testing station, and to test the cable independent of the transmitter coil when opposing ends of the cable are connected to cable

testing stations.” (See, Applicants’ claim 30, above.) As noted above, Hayhurst discloses that “[t]he conductors within tester 50 **establish current paths** with the center conductor and shield of cable 34.” (See, Hayhurst, col. 3, lns. 43-52; emphasis added.) Applicants submit that those current paths, which comprise conductors, batteries, resistors, and LEDs, are able to conduct current, but are not configured “to drive the transmitter coil via a first cable testing station to concurrently test the cable and the transmitter coil.” (See, Applicants’ claim 30, above.) As would be appreciated, merely sending an electrical signal through a cable is not equivalent to the encoding, etc. required to drive a “transmitter coil.”

11. In the Office Action, the Examiner attempts to rely on Crosby to cure the deficiencies of Hayhurst. As noted above, the Examiner asserts that “Crosby discloses a cochlear implant system for an auditory prosthesis [see title] comprising a cable 26 (the first component) and a transmitter coil 24 (the second component).” (See, Office Action, page 3.) However, Applicants submit that Crosby also fails to disclose “a testing circuit configured to drive the transmitter coil via a first cable testing station to concurrently test the cable and the transmitter coil when the cable is connected to the first cable testing station,” as recited in Applicants’ claim 30. (Emphasis added.) Applicants submit that because Crosby fails to disclose any type of a cable testing station it would be impossible for Crosby to drive a transmitter coil via such a non-existent cable testing station. Accordingly, Applicants submit that Hayhurst and Crosby, taken alone or in combination, fail to expressly or inherently disclose all of the limitations of Applicants’ amended claim 30.

Claim Rejections Under 35 USC § 103– Strangio in view of Crosby

12. Claims 1, 5, 7, 15-21, 25 and 27-29 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,280,251 to Strangio in view of U.S. Patent No. 4,532,930 to Crosby et al. (hereinafter, “Crosby”). By the foregoing amendments, Applicants have cancelled claims 1, 5, 7, 9-11, 15-21, 25 and 27-29, thereby rendering the rejections of these claims moot. However, for the Examiner’s edification Applicants will briefly explain why new claims 30-50 are patentable over the combination Hayhurst and Crosby. Specifically, Applicants assert that the modification of Hayhurst in view of Crosby is improper, and that the cited references fail to expressly or inherently disclose all the elements of Applicants’ new claims.

The Proposed Modification of Strangio in view of Crosby is Improper

13. Applicants submit that the proposed modification of Strangio in view of Crosby is improper because the Examiner has failed to provide an appropriate basis for making the proposed modification. As noted above, the Supreme Court recognized that “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some ***articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.***” (*See KSR*, 127 S.Ct. at 1741 (citing *In re Kahn*, 441 F.3d 977, 988 (C.A.Fed. 2006); emphasis added.) Applicants submit that the Examiner has failed to provide adequate reasoning for making the proposed modification.
14. Strangio is directed to “[a] multi-conductor cable tester and continuity analysis system having two groups of connector sockets.” (*See*, Strangio, Abstract.) Strangio discloses a test fixture 50 that includes one group of connectors 60L having a plurality of different connectors for mating with an end of a cable, and another group of connectors 60R having a plurality of different connectors for mating with an end of a cable. (*See*, Strangio, col. 3, lns. 12-18.) In addition, Strangio discloses a test fixture 50 that tests a multi-conductor cable, wherein the test includes “determining the point-to-point continuity of every pin at each end of the cable.” (*See*, Strangio, col. 3, lns. 29-32.)
15. In the Office Action, the Examiner admits that “Hayhurst . . . failed to disclose a cochlear implant system with a first and second component comprises a transmitter coil and coil testing station.” (*See*, Office Action, page 6.) (As this is a rejection over Strangio and Crosby, Applicants assume that the Examiner intended to make this assertion with regard to Strangio.) The Examiner relies upon Crosby to teach “a cochlear implant system for an auditory prosthesis [see title] comprising a cable 26 (the first component) and a transmitter coil 24 (the second component).” (*See*, Office Action, page 6.) The Examiner asserts that “it would have been obvious to one of ordinary skills in the art by the time the invention was made to modify Hayhurst to be use to test cochlear implant system cable and transmitter coil since both Crosby and Hayhurst teaches about the use of coaxial cable.” (*See*, Office Action, page 3.) (Again, as this is a rejection over Strangio and Crosby, Applicants assume that the Examiner intended to make this assertion with regard to Strangio.)

16. As noted above, Strangio teaches a cable tester that “determin[es] the *point-to-point continuity* of *every pin* at each end” of a multi-conductor cable. (*See*, Strangio, col. 3, lns. 31-32; emphasis added.) Applicants submit that testing an inductive transmitter coil is an entirely different than performing point-to-point continuity testing of every pin at each end of a multi-conductor cable. As noted above, the Examiner appears to admit that Strangio fails to disclose a coil testing station, and Applicants submit that Crosby’s teaching of a cable connected to a transmitter coil fails to provide an adequate reason why it would have been obvious to modify the cable tester of Strangio to test a coil. Applicants submit that the mere fact that a cable may be connected to a coil is not an adequate reason why it would have been obvious to modify Strangio’s system to test an inductive transmitter coil. As such, Applicants submit that the Examiner has only provided a conclusory and unsupported statement to explain why one of ordinary skill would seek to modify Strangio in view of Crosby.

17. Furthermore, Applicants submit that there is no adequate reason to combine the cited references because modifying Strangio to include an inductive connection would render Strangio unusable for its intended purpose. As noted, Strangio “determin[es] the *point-to-point continuity* of *every pin* at each end” of a multi-conductor cable. (*See*, Strangio, col. 3, lns. 31-32; emphasis added.) In order to perform these tests, a direct electrical connection through the conductors is required. However, testing an inductive transmitter coil requires an inductive connection, rather than a direct electrical connection as shown by Strangio. Applicants submit that, by replacing the direct electrical connection with an inductive connection, the above specific functionality of Strangio may be lost, and/or result in process which may consumes more time or power than a direct electrical connection, or result a process which is more susceptible to errors or malfunctions. Accordingly, Applicants submit that there is no adequate reason to modify the system of Strangio as proposed by the Examiner. Thus, Applicants respectfully submit that the proposed modification of Strangio is improper.

***The Proposed Modification of Strangio Does not Contain
All Elements of Applicants' New Claims***

Claim 30

18. Applicants' amended claim 30 recites, in part, a “ testing comprising: a plurality of cable testing stations each configured to electrically connect to an end of the cable; a coil testing station comprising a receiver coil configured to be inductively coupled to the transmitter coil in the first configuration; and a coil testing station configured to inductively connect to the transmitter coil; and a testing circuit configured to drive the transmitter coil via a first cable testing station to concurrently test the cable and the transmitter coil when the cable is connected to the first cable testing station, and to test the cable independent of the transmitter coil when opposing ends of the cable are connected to cable testing stations.” (See, Applicants' claim 30, above.) As noted above, Strangio discloses that test fixture 50 “determin[es] the ***point-to-point continuity*** of ***every pin*** at each end of the cable.” (See, Strangio, col. 3, lns. 29-32; emphasis added.) As would be appreciated, merely sending an electrical signal through a cable is not equivalent to the encoding, etc. required to drive a “transmitter coil,” as recited in Applicants' amended claim 30.

19. In the Office Action, the Examiner attempts to rely on Crosby to cure the deficiencies of Strangio. As noted above, the Examiner asserts that “Crosby discloses a cochlear implant system for an auditory prosthesis [see title] comprising a cable 26 (the first component) and a transmitter coil 24 (the second component).” (See, Office Action, page 3.) However, Applicants submit that Crosby also fails to disclose “a testing circuit configured to drive the transmitter coil via a first cable testing station to concurrently test the cable and the transmitter coil when the cable is connected to the first cable testing station,” as recited in Applicants' amended claim 30. (Emphasis added.) Applicants submit that because Crosby fails to disclose any type of a cable testing station, it would be impossible for Crosby to drive a transmitter coil via such a non-existent cable testing station. Accordingly, Applicants submit that Strangio and Crosby, taken alone or in combination, fail to expressly or inherently disclose all of the limitations of Applicants' claim 30.

Claim 50

20. Applicants' new claim 50 recites, in part, "driving, with a testing circuit, the cable and transmitter coil via a first cable testing station so as to induce a voltage in a receiver coil of the apparatus to concurrently test the cable and the transmitter coil." (*See*, Applicants' new claim 50, above.) For at least the reasons provided above, Applicants submit that the cited references fail to disclose at least these limitations of claim 50. As such, Applicants respectfully submit that claim 50 is allowable over Hayhurst, Strangio and Crosby at least for reasons similar to those discussed above with regard to Applicants' claim 30.

Utility of Concurrent Testing

21. As an additional matter, in the Office Action, the Examiner states "[l]acking criticality, especially when applicant has no advantage of concurrently testing the components...the Examiner "has taken the position that the references are capable of testing the first component and the second component currently since in applicant disclosure there is no advantage of testing these components at the same time." (*See*, Office Action, pages 7-8.) However, Applicants submit that one of ordinary skill in the art would recognize that concurrent testing of components, such as a cable and a transmitter coil, for example, provides a potential for time savings relative to individual testing of those components and is therefore useful and advantageous. As such, Applicants respectfully request that the Examiner withdraw the assertion that there is "no advantage of concurrently testing the components."

Dependent claims

22. The dependent claims incorporate all the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the art of record. Accordingly, Applicants respectfully assert that the dependent claims are also allowable over the art of record.

Conclusion

23. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.
24. Applicants reserve the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application. Any cancellations and amendments of above claims, therefore, are not to be construed as an admission regarding the patentability of any claims and Applicants reserve the right to pursue such claims in a continuation or divisional application.

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